The broad aims for the course are to enable the students to:

- request appropriate pathological tests
- be able to interpret the results of these tests
- use the results of the tests to help to form a management plan, including when to repeat the tests
- understand the scientific basis of the tests requested
- know when to ask the laboratory for help

Overview of the Biochemistry section of the course

The most important aspects of Biochemistry to be covered in the Undergraduate Medical Course as a whole consist of the management of fluids, the management of lipid disorders, the investigation and treatment of endocrine disorders and the appropriate use of the Biochemistry laboratory. The Core Lectures and Academy tutorials are designed to reflect this.

As described above, the emphases of the Biochemistry section of the course are on the use of the laboratory (as the majority of the requests made to the laboratory by Foundation Doctors will be to the Biochemistry Laboratory), the interpretation of these tests and the utilisation of the results. Clinically, the most important sections are the management of fluid balance on the wards, and Lipid disorders. Other aspects of Biochemistry, for example Diabetes Mellitus and Endocrinology, are covered in other sections of the course, so the teaching on these topics during the Pathology module will mainly be confined to the Biochemical investigations involved rather than the clinical management.

Overview of the Haematology section of the course

The main aspects to be emphasised in the Haematology module are:

- Use of the laboratory
- Coagulation
- Transfusion
- Haematological malignancies

As Foundation doctors, the students will be involved in the monitoring of full blood counts, monitoring coagulation and prescribing blood on a daily basis, and by the end of the module they should be competent to do this. They should also be aware of the Haematological malignancies, the symptoms and signs with which they present, and how the initial investigation should proceed. They are not required to have a detailed knowledge of the rare haematological malignancies, as this is postgraduate knowledge and will not be appropriate at this level. They should also understand the principles of coagulation in the context of surgery, i.e. the precautions that should be taken prior to surgery in terms of coagulopathies.
Overview of the Histopathology section of the course

During the Histopathology section, the students will learn to correlate the clinical aspects of a case with the pathology, both micro- and macroscopically. They will also cover the process of Death Certification and have the opportunity to observe Post Mortems, whether live or via the link from the Flax Bourton facility.

The four aspects of the Histopathology course are:

- Use of the laboratory and requesting Histopathology investigations (LAB)
- Death and the Coroner (COR)
- Pathophysiology of common diseases (PATH)
- Clinico-pathological correlation (CPC)

Unlike the other specialties, in Histopathology the 3rd and 4th of these themes (i.e. Pathophysiology and Clinico-pathological considerations) will be covered in all of the Core Lectures. Death and the Coroner will be covered in an Academy tutorial, as this subject is best covered in small groups – this format means that students may have the opportunity to fill in Death Certificates themselves. The use of the laboratory will also be mostly covered in the Academies, in that the new Foundation Doctors will not be requesting Histopathology investigations on as regular a basis as they are requesting other Pathology tests. The theory of such requests do need to be covered in the Academy tutorials.

Overview of the Microbiology section of the course

With the current fears over resistant bacteria, the Microbiology section will place an emphasis on Antimicrobial Stewardship, although the prescription of antibiotics are covered elsewhere in the course.

The four aspects of the Microbiology section are:

- Use of the Microbiology Laboratory (LAB)
- Antimicrobial Stewardship (AMS)
- Infection Control (IC)
- Public Health (PH)